BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK:- Improvements to roads and drains to Vinayakanagar and surrounding areas in ward no.11 in Kuvempunagar

								Estimation Cost.Rs	9900000.00
Sl No	Description of work	Unit	Mesurement No.	L	B	D	Qty	Rate	Amount
1	KSRRB 300-1. **Earthwork excavation by manual means for roads,** drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications(P.No-143 &136 ,I No-19.1&17.4& 17.1) 5km lead= 57+2.0x1.28x5 =69.80								
	New Drain								
	Sai Garden								
	Main Road	Cum	2	63.60	1.10	1.05	146.92		
	Prakruthi Layout								
	Main Road	Cum	2	178.60	1.10	1.00	392.92		
	1st Cross Road	Cum	2	52.90	1.10	1.00	116.38		
	Varadharaj Nagar								
	5th Cross Road	Cum	1	21.00	1.00	1.00	21.00		
	Main Road	Cum	1	19.60	1.10	1.00	21.56		
	Culvert								
	Sai Garden	Cum	1	6.60	1.7	1.05	11.78		
	Prakruthi Layout								
		Cum	1	7.70	1.70	1.05	13.74		
		Cum	1	8.60	1.70	1.05	15.35		
		Cum	1	7.70	1.70	1.05	13.74		
	Basic rate							130.00	
	Area weightage 6%							7.80	
	5Km lead & Lift= 57+(2*1.28*5)							69.80	
	Total						**753.40**	**207.60**	**156406.00**
2	KSRB 4-1.2 : Providing and laying in position plain cement concrete of Mix 1:3:6 with OPC @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregates @ 0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM curing complete as per specifications. Specification No. KBS 4.1, 4.2								
	New Drain								
	Sai Garden								
	Main Road	Cum	2	63.60	1.10	0.15	20.99		
	Prakruthi Layout								
	Main Road	Cum	2	178.60	1.10	0.15	58.94		
	1st Cross Road	Cum	2	52.90	1.10	0.15	17.46		
	Varadharaj Nagar								
	5th Cross Road	Cum	1	21.00	1.00	0.15	3.15		
	Main Road	Cum	1	19.60	1.10	0.15	3.23		
	Culvert								
	Sai Garden	Cum	1	6.60	1.70	0.15	1.68		
	Prakruthi Layout								
		Cum	1	7.70	1.70	0.15	1.96		
		Cum	1	8.60	1.70	0.15	2.19		
		Cum	1	7.70	1.70	0.15	1.96		
	Basic rate							5194.00	
	Area weightage 6%							311.64	
						Total	**111.57**	**5505.64**	**614265.00**

	Description of work	Unit	Mesurement No.	L	B	D	Qty	Rate	Amount
3	Providing laying plain/ reinforced cement concrete for side Drains Using M20 nominal mix Concrete with OPC at 300kgs.With 20mm and Down size granite metal coarse aggregate at 0.69cum and fine aggregate at 0.43cum Machne mixed, well compacted for wall and Bottom including centering shuttering,cost of materials,HOM of Machinery,Curing Etc.,Complete Excluding cost of Steel as per morth MORTH specification No. 1500, 1700, 2200. Including Cost of material, Labour, HOM complete as per Specification-WALL & Bottom thickness 15Cm(Item No 37.59.2 page no 271)								
	Bottom Raft								
	Sai Garden								
	Main Road	Cum	2	63.60	0.90	0.15	17.17		
	Prakruthi Layout								
	Main Road	Cum	2	178.60	0.90	0.15	48.22		
	1st Cross Road	Cum	2	52.90	0.90	0.15	14.28		
	Varadharaj Nagar								
	5th Cross Road	Cum	1	21.00	0.75	0.15	2.36		
	Main Road	Cum	1	19.60	0.90	0.15	2.65		
	Culvert								
	Sai Garden	Cum	1	6.60	1.50	0.20	1.98		
	Prakruthi Layout								
		Cum	1	7.70	1.50	0.20	2.31		
		Cum	1	8.60	1.50	0.20	2.58		
		Cum	1	7.70	1.50	0.20	2.31		
	Walls								
	Sai Garden								
	Main Road	Cum	4	63.60	0.15	0.70	26.71		
	Prakruthi Layout								
	Main Road	Cum	4	178.60	0.15	0.60	64.30		
	1st Cross Road	Cum	4	52.90	0.15	0.60	19.04		
	Varadharaj Nagar								
	5th Cross Road	Cum	2	21.00	0.15	0.65	4.10		
	Main Road	Cum	2	19.60	0.15	0.65	3.82		
	Culvert								
	Sai Garden	Cum	2	6.60	0.20	0.60	1.58		
	Prakruthi Layout								
		Cum	2	7.70	0.20	0.65	2.00		
		Cum	2	8.60	0.20	0.65	2.24		
		Cum	2	7.70	0.20	0.65	2.00		
	Basic rate							6670.00	
	Area weightage 6%							400.20	
	Total						**219.66**	**7070.20**	**1553030.00**
4	KSRB M2200-6 Providing T.M.T bars Fe 500 steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. MORTH Specification NO.1600&2200Specification No. Pg No.229 Item No.28.8.2								
	For Drain	Cum					202.65		
		kg	Steel assumed 70Kg/Cum of Concrete				14185.82		
		tonne					**14.19**		
	For Culvert	Cum					17.00		
		kg	Steel assumed 100Kg/Cum of Concrete				1700.40		
		tonne					**1.70**		
	Basic rate							68233	
	Area weightage 6%							4093.98	
	Total						**15.89**	**72326.98**	**1149002.00**

	Description of work	Unit	Mesurement No.	L	B	D	Qty	Rate	Amount
5	Providing and Fixing pre cast covering Slab made out of CC 1:2:4 with 10cm thick and Finishing cutting ,including form work,curing,including cost of alll materials, labour,hire charges of machinery,loading,unloading,lead and lift,transportation etc ,copmplete. (Data Rate)								
	Drain cover slab								
	Sai Garden								
	Main Road	Sqm	2	94.70	0.90		170.46		
	Prakruthi Layout	Sqm							
	Main Road	Sqm	2	178.60	0.90		321.48		
	1st Cross Road	Sqm	2	52.90	0.90		95.22		
	Varadharaj Nagar								
	5th Cross Road	Sqm	1	21.00	0.75		15.75		
	Main Road	Sqm	1	19.60	0.90		17.64		
				Sub Total			620.55		
	Deduct BS Slab 10% in *Front of House*						65.47		
	Data rate							**2337.00**	
	Total						**555.08**	**2337.00**	**1297227.00**
6	Providing and Fixing pre cast **covering Slab 250mm thick** made out of CC 1:2:4 and jelly 20mm Down size with steel reinforcement including form work,curing,including cost of alll materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc ,complete.As per Engineer incharge								
	Culvert cover Slab								
	Sai Garden	Sqm	1	6.60	1.50		9.90		
	Prakruthi Layout								
		Sqm	1	7.70	1.50		11.55		
		Sqm	1	8.60	1.50		12.90		
		Sqm	1	7.70	1.50		11.55		
	Data rate							**5418.00**	
	Total						**45.90**	**5418.00**	**248687.00**
7	Providing and fixing **pre cast solid cement concrete kerb stones** made out of CC 1:2:4 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting including formwork, curing, including cost of materials, labour charges of machinery, loading and unloading, lead and lift, transportation ete.,complete. As per the direction of Engineer incharge. (P.No.27, I.No.5.30 of PW, P&IWTD SR 2018-19)								
	Sai Garden								
	Main Road	**Nos**	2	63.60		/0.45	282.67		
	Prakruthi Layout								
	Main Road	**Nos**	2	178.60		/0.45	793.78		
	1st Cross Road	**Nos**	2	52.90		/0.45	235.11		
	Basic rate							408.00	
	Area weightage 6%							24.48	
	Total						**1312.00**	**432.48**	**567414.00**
8	KSRRB 800-1. **Painting two coats** after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications. MORTH Chapter 8 (Page No.180. Iitem no.24.1 of KPWD S.R Bangalore Circle 2018-2019)								
	Sai Garden								
	Main Road	**Sqm**	2	63.60		0.35	44.52		
	Prakruthi Layout								
	Main Road	**Sqm**	2	178.60		0.35	125.02		
	1st Cross Road	**Sqm**	2	52.90		0.35	37.03		
	Basic rate							80.00	
	Area weightage 6%							4.80	
	Total						**206.57**	**84.80**	**17518.00**

	Description of work	Unit	Mesurement No.	L	B	D	Qty	Rate	Amount
9	KSRRB M200-24. Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials stacking serviceable and unserviceable materials seperately complete as per specifications. MORTH Specification No. 202(P.No.140- I.No.18.47) & Pg No.136, Item No.17.4,17.1 (5km lead = 57+2*1.28X5)								
	Vinayak Nagar								
	Bhairaveshwara Swammy Floor Mill	Cum	1	142.10	3.50	0.20	99.47		
	Varadharaj Nagar								
	5th Cross Road	Cum	1	98.60	3.70	0.20	72.96		
	3rd Cross Road	Cum	1	83	3.45	0.2	56.36		
	Deduction								
	Ugd Chamber	Cum	-11	0.44		0.15	-0.73		
			Area of circle=(3.14X.75²)/4=0.44						
		Cum	-1	2.00	1.50	0.15	-0.45		
		Cum	-1	1.70	0.80	0.15	-0.20		
	Basic rate							899.00	
	Area weightage 6%							53.94	
	5Km lead & Lift= 57+(2*1.28*5)							69.80	
	Total						**227.41**	**1022.74**	**232579.00**
10	KSRRB 300-50. Scarifying bituminous course 50mm to 75mm thick along with premix carpet / surface dressing by road roller attached with scarifier without disturbing the base and stacking the debris including cost of all labour charges, HOM of machineries complete as per specifications. MORTH / Chapter 3(P.No.146, I.No.19.56)								
	Varadharaj Nagar								
	7th Cross Road	Sqm	1	110.90	3.90		432.51		
	Deduction								
	Ugd Chamber	Sqm	-3	0.44			-1.32		
			Area of circle=(3.14X.75²)/4=0.44						
	Basic rate							39.00	
	Area weightage 6%							2.34	
	Total						**431.19**	**41.34**	**17826.00**
11	KSRRB M300-14. **Excavation for roadwork in all types of soil** by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications MORTH Specificatio MORTH Specification No.301Loading and unloading with 10km lead= (I No-19.14,P No-143)								
	Vinayak Nagar								
	Bhairaveshwara Swammy Floor Mill	Cum	1	142.10	3.50	0.10	49.74		
	Varadharaj Nagar								
	5th Cross Road	Cum	1	98.60	3.7	0.10	36.48		
	7th Cross Road	Cum	1	110.90	3.9	0.10	43.25		
	3rd Cross Road	Cum	1	82.5	3.45	0.1	28.46		
	Deduction								
	Ugd Chamber	Cum	-11.00	0.44		0.10	-0.49		
			Area of circle=(3.14X.75²)/4=0.44						
		Cum	-1.00	2.00	1.50	0.10	-0.30		

	Description of work	Unit	Mesurement No.	L	B	D	Qty	Rate	Amount
		Cum	-1.00	1.70	0.80	0.10	-0.14		
	Basic rate							41.00	
	Area weightage 6%							2.46	
	5Km lead= (2*1.28*5)							12.80	
	Total						**157.01**	**56.26**	**8834.00**
12	KSRB 4-1.3 : Providing and laying in position plain cement concrete of Mix 1:4:8 with OPC @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregates @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, including cost of all materials, labour, HOM curing complete as per specifications. Specification No. KBS 4.1, 4.2								
	Vinayak Nagar								
	Bhairaveshwara Swammy Floor Mill	Cum	1	142.10	3.50	0.15	74.60		
	Varadharaj Nagar								
	5th Cross Road	Cum	1	98.60	3.70	0.15	54.72		
	7th Cross Road	Cum	1	110.90	3.90	0.15	64.88		
	3rd Cross Road	Cum	1	82.50	3.45	0.15	42.69		
	Deduction								
	Ugd Chamber	Cum	-11	0.44		0.15	-0.73		
			Area of circle=(3.14X.75²)/4=0.44						
		Cum	-1	2.00	1.50	0.15	-0.45		
		Cum	-1	1.70	0.80	0.15	-0.20		
	Basic rate							5102.00	
	Area weightage 6%							306.12	
							Total	**235.51**	**5408.12**	**1273684.00**
13	Cement concrete pavement.Construction of un-reinforced plain cement concrete pavement, using a grade concrete M30 over a prepared base with OPC coarse aggregate @ 0.69cum fine aggregate @ 0.46cum,coarse and fine aggregate confirming to IS:383-2016,with superplastisiser @3lts confirming to IS9103-2008mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane, selant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades, textured with texturing machine,and curing including cost of all materials,labour,hire chargedof machines,all lead and lift charges etc., complete as per specifications. - do with OPC at 360Kg per cum coarse aggregate @ 0.69cum and fine aggregate @ 0.46cum Pg No.176Item No.22.6.1								
	Vinayak Nagar								
	Bhairaveshwara Swammy Floor Mill	Cum	1	142.10	3.50	0.15	74.60		
	Varadharaj Nagar								
	5th Cross Road	Cum	1	98.60	3.70	0.15	54.72		
	7th Cross Road	Cum	1	110.90	3.90	0.15	64.88		
	3rd Cross Road	Cum	1	82.50	3.45	0.15	42.69		
	Deduction								
	Ugd Chamber	Cum	-11	0.44		0.15	-0.73		
			Area of circle=(3.14X.75²)/4=0.44						
		Cum	-1	2.00	1.5	0.15	-0.45		

	Description of work	Unit	Mesurement No.	L	B	D	Qty	Rate	Amount
		Cum	-1	1.70	0.80	0.15	-0.20		
	Basic rate							4916.00	
	Area weightage 6%							294.96	
	Total						**235.51**	**5210.96**	**1227250.00**
								Grand Total	**8363722.00**
								GST Charges (12% of estimated cost)	**1003647.00**
								For 3% KRIDL Charges	**334549.00**
								DPR Charges (1% of estimated cost)	**99000.00**
								Project management And Consultancy Charges(1% of estimated cost)	**99000.00**
								Miscellenious and rounding	**82.00**
								Total Amount	**9900000.00**
									RUPEES NINETY NINE LAKHS ONLY

CERTIFICATE:

1) The work spot has been inspected and found to be necessary
2) The work spot comes under B.B.M.P
3) The provisions made in the estimate are necessary and minimum
4) The estimate is based on C.S.R of 2018-2019,Issue rates and Data Rates.

Assistant Engineer

Assistant Executive Engineer

ASSISTANT EXECUTIVE ENGINEER
Vidyaranyapura Sub-Division
Bruhath Bengaluru Mahanagara Palike

Executive Engineer

ಕಾರ್ಯನಿರ್ವಾಹಕ ಅಭಿಯಂತರರು
ವಿದ್ಯಾರಣ್ಯಪುರ ವಿಭಾಗ
ಬೃ.ಬೆ.ಮ.ಪಾ., ಬೆಂಗಳೂರು

ADMINISTRATIVE APPROVAL

Accorded For Rs. 99.00 Lakhs, Ninety Nine Lakhs only

Head of A/c. D3727, SC-SP/TSP.

Div. Ref. No. 64/19-20 Date. 24/10/19

AE 24/10

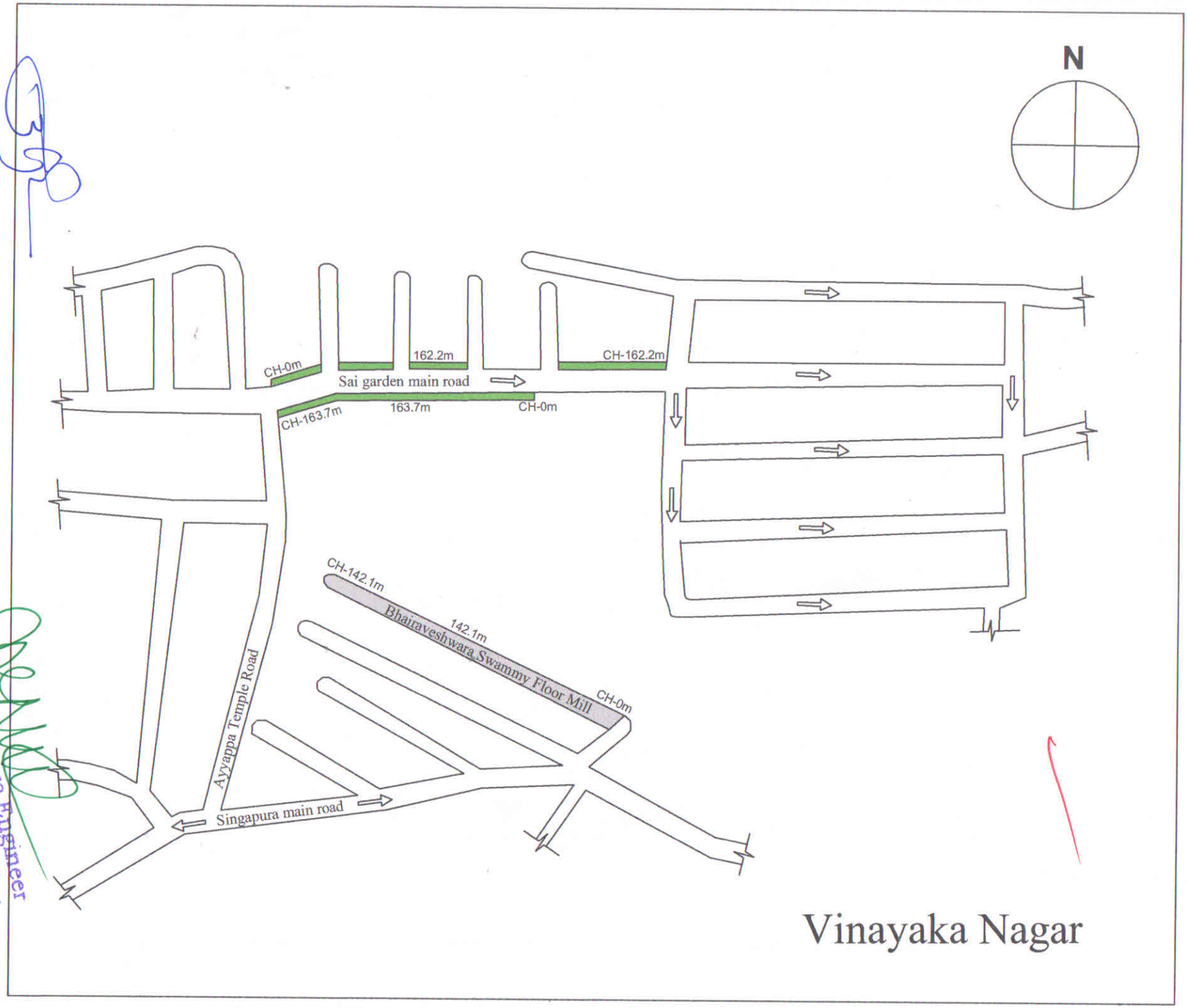
EE(BTP) 24/10

Technical Sanction

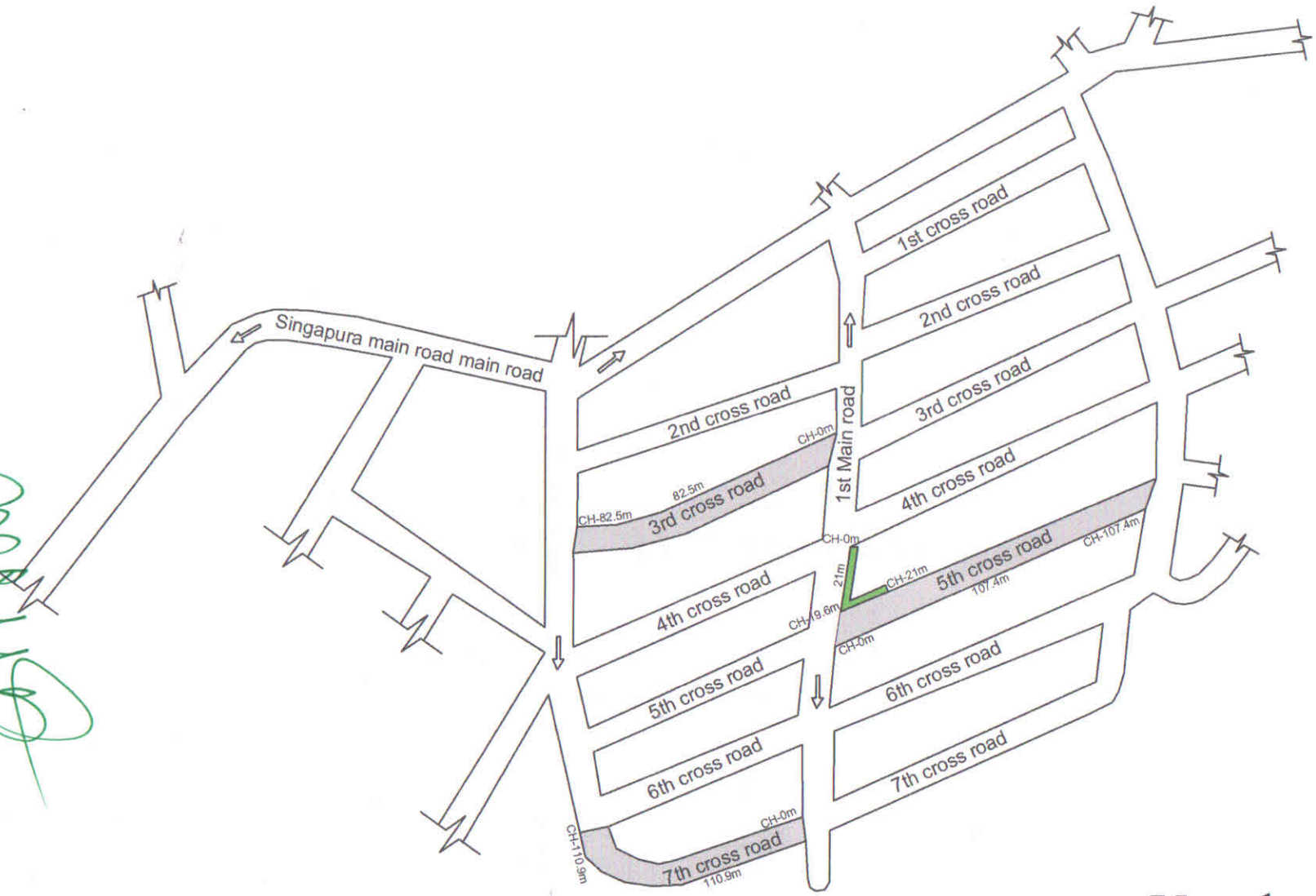
Accorded For 99,00,000 Ninety Nine Lakhs

Head of A/C. D...3727

CER NO : 150 Dt: 28-10-19



Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore-97



Varadaraj nagar

Assistant Executive Engineer
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Prakruthi Layout

Assistant Executive Engineer
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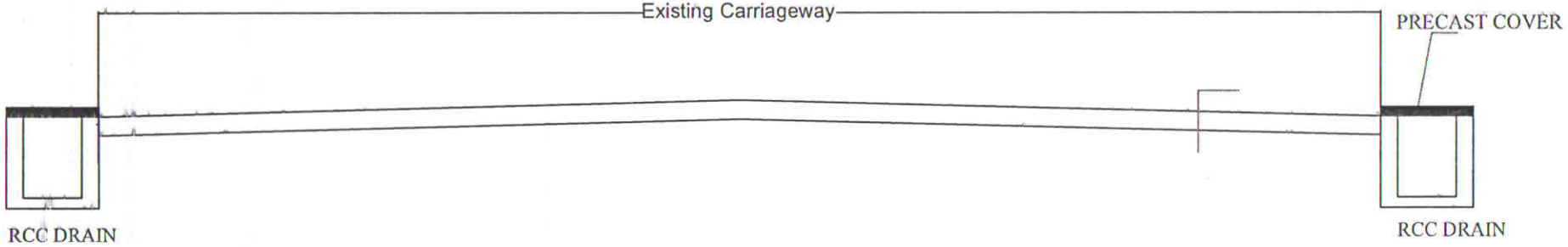
BBMP, Bangalore - 97



TYPICAL CROSS SECTION OF RCC DRAIN

Assistant Executive Engineer
Vidyaranyapura Sub Division
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